

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for [[the]] thermal ~~treatment of treating~~ granular solids in a reactor (1) with a swirl chamber (4), ~~which in particular constitutes an flash reactor or suspension reactor, wherein feeding~~ microwave radiation from a microwave source (2) [[is fed]] into the reactor (1) through a wave guide, characterized in that wherein the wave guide constitutes a gas supply tube (3) and additionally feeding a gas stream [[that]] through the gas supply tube (3) a ~~gas stream is additionally fed~~ into the swirl chamber (4).

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ wherein the gas stream introduced through the gas supply tube (3) is utilized for an additional fluidization of [[the]] a fluidized bed formed in the swirl chamber (4).

3. (Currently Amended) The method as claimed in ~~any of claims 1 or 2, characterized in that~~ claim 1, wherein by ~~means of introducing~~ the gas stream introduced into the gas supply tube, (3) solid deposits in the gas supply tube (3) are avoided.

4. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein the ~~used frequency of the microwave radiation~~ [[lies]] has a frequency between 300 MHz and 30 GHz, ~~preferably at the frequencies 435 MHz, 915 MHz and 2.45 GHz.~~

5. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein the ~~temperatures in~~ the reactor [[(1) lie]] has a temperature between 150°C and 1200°C.

6. (Currently Amended) A plant for [[the]] thermal ~~treating treatment of~~ granular solids, ~~in particular for performing the method as claimed in any of claims 1 to 5, claim 1,~~ comprising a reactor (1) with swirl chamber (4), ~~which in particular constitutes an flash reactor or suspension reactor,~~ a microwave source (2) disposed outside the reactor

(1), and a wave guide for feeding microwave radiation into the reactor (1), characterized in that wherein the wave guide constitutes a gas supply tube (3) through which a gas stream can additionally be fed into the swirl chamber (4).

7. (Currently Amended) The plant as claimed in claim 6, characterized in that wherein the gas supply tube (3) has a rectangular or round cross-section which is adjustable whose dimensions are adjusted in particular to the used frequency of the microwave radiation.

8. (Currently Amended) The plant as claimed in claim 6 or 7, characterized in that wherein the gas supply tube (3) has a length of 0.1 m to 10 m.

9. (New) The method as claimed in claim 4, wherein the frequency is 435 MHz, 915 MHz, or 2.45 GHz.

10. (New) The method as claimed in claim 6, wherein the swirl chamber comprises a flash reactor or a suspension reactor.